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S.N. 10/662062

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REMARKS

Claims 1-20 remain in the application.

Claims 1, 5, 8, 15, and 18 were amended to more particularly point out and distinctly claim the subject matter of the claims.

Claims 2, 9, 12-14, 19, and 20 were amended to provide proper antecedent basis with the amendments to claims 1, 5, 8, 15, and 18.

35 USC 102 Rejection:

Claims 1, 2, 4-10, and 13-19 were rejected under 35 USC 102(b) over United States patent no. 6,396,250 issued to Bridge. It is believed that the amendments to the claims now overcome this rejection.

Amended claim 1 includes, among other features, a sensing device configured to receive a sense current representative of a current through the second switch, a control circuit configured to receive the first current and the second current, ... the control circuit also configured to use the first current to selectively decouple the sense current from the control circuit. It is believed that the relied on reference does not disclose at least these elements of amended claim 1. Note that Bridge discloses sensing an output voltage and does not disclose receiving a sense current that is representative of the current through the second switch. Note that the Bridge circuit of FIG. 7 referenced in the Office Action and even the Bridge circuit of FIG. 5 disclose using an output voltage and do not disclose receiving a sense current. Additionally, the Bridge reference does not disclose using a first current to

ONS000496
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S.N. 10/662062

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decouple the sense current from the control circuit. Note that in the circuit of FIG. 5, the Bridge reference senses the output voltage and switches the output voltage to capacitor C1 and capacitor C2. Even if this could be interpreted as forming a first current and a second current as called for in amended claim 1, Bridge still does not disclose using the first current to selectively decouple the sense current from the control circuit. Note that the Bridge circuit of FIG. 7 does not decouple the sense voltage from the sense circuit and that the Bridge circuit of FIG. 5 may decouple the sense voltage but does not disclose using the first current to selectively decouple the sense current from the control circuit. Accordingly, it is respectfully submitted that for at least these reasons amended claim 1 is not anticipated by the relied on reference.

Claims 2 and 4-7 depend from amended claim 1 and are believed to be allowable for least the same reasons as amended claim 1.

Additionally, amended claim 5 includes the sensing device configured to store a value of both the first current ... and store a value of the second current ... during at least a portion of an active time of the second input signal. The Bridge reference does not disclose storing a value of both the first current and the second current during a portion of an active time of the signal that is used to enable the second switch. Regarding FIG. 5, Bridge discloses in column 4, lines 55-67, closing switch S1 during a conduction portion of switch 504 and closing switch S2 during a body diode conduction time of switch 504. However Bridge does not disclose closing both switch S1 and switch S2 during an active time of the signal used to enable switch

ONS000496
PATENT

S.N. 10/662062

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504. Accordingly, it is respectfully submitted that the relied on reference cannot anticipate amended claim 5.

Amended claim 8 includes, among other features, a sensing transistor having a drain coupled to the switch node for selectively forming a sense current that is representative of a current in the low side MOSFET switch, a control structure configured to receive the sense current and responsively form a first current that is representative of the current in the low side MOSFET switch and a second current that is representative of the current in the low side MOSFET switch, the control structure configured to store the first current as a first value and store the second current as the second value during a portion of an active time of the low side MOSFET switch, and configured to use the first current and the second current to selectively form the sense current. It is believed that at least these elements of amended claim 8 are not disclosed by the Bridge reference. Bridge does not disclose using a sensing transistor having a drain coupled to the switch node to form a sense current that is representative of a current in the low side MOSFET switch. Bridge is silent on using a sensing transistor to form a sense current. Even if Bridge's switch S1 or switch S2 of FIG. 5 could be considered a sensing transistor, Bridge does not disclose that the switches form a current representative of the current in the low side MOSFET switch. Additionally, Bridge teaches against storing a value of the first current and a value of the second current during a portion of an active time of the low side MOSFET switch (see Bridge's column 4 lines 55-67). Further, Bridge does not disclose using the first current and the second current to selectively form the sense current.

ONS000496
PATENT

S.N. 10/662062

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Bridge couples the sense voltage to the sensing circuit and does not selectively form a sense voltage much less selectively form a sense current. Accordingly, it is respectfully submitted that the Bridge reference cannot anticipate amended claim 8.

Claims 9, 10, and 12-14 depend from claim 8 and are believed to be allowable for least the same reasons as claim 8.

Amended claim 15 includes, among other elements, selectively forming a current sense signal representative of a current in the low side switch, using the current sense signal to form a first current and a second current that are representative of the current sense signal, storing a value of the first current ... and the second current ... during at least a portion of an active time of the low-side switch, and using the first stored value and the second stored value for selectively forming the current sense signal. At least these elements of amended claim 5 are not disclosed by the Bridge reference. Bridge does not disclose using a current sense signal representative of a current in the low side switch nor does Bridge disclose storing a value of the first current and the second current during a portion of an active time of the low-side switch. Bridge discloses sensing a voltage not a current. Bridge also does not disclose storing a value of both the first current and a second current during a portion of an on-time of the low-side switch but discloses storing a value of the sense voltage during the on time of the low-side switch and then storing another value of the sense voltage during a different time (column 4, lines 55-67. Thus, Bridge does not disclose storing both the first current and second current value

ONS000496
PATENT

S.N. 10/662062

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during the on time of the low-side switch. Furthermore, Bridge does not disclose using the first stored value and the second stored value for selectively forming the current sense signal. FIG. 5 of Bridge discloses closings switch S1 during a conduction portion of switch 504 and discloses closing switch S2 during a body diode time of switch S2 but does not disclose using the stored values to selectively form a current sense signal. Accordingly, it is respectfully submitted that the relied on reference is deficient in anticipating amended claim 15.

Claims 16-20 depend from amended claim 15 and are believed to be allowable for least the same reasons as claim 15. Additionally, claim 18 calls for, among other things, using the first stored value and the second stored value for disabling the MOSFET used for sensing the current in the low side switch. At least this element of claim 18 is not disclosed by the Bridge reference. Accordingly, it is respectfully submitted that claim 18 is not disclosed by the relied on reference.

35 USC 103 Rejection:

Claims 3, 11, and 20 were rejected under 35 USC 103 over United States patent no. 6,396,250 issued to Bridge in view of United States patent no. 6,058,037 issued to Shibata et al. This rejection is respectfully traversed.

Claim 3 depends from claims 1 and 2 and includes all the limitations of claims 1 and 2. The deficiency of the Bridge reference relative to claims 1 and 2 is explained in the traversal of the 35 USC 102 rejection of claims 1 and 2. The addition of the charge controlled delay circuit of Shibata et al does not make-up for the deficiencies of Bridge. Accordingly, it is respectfully submitted that

ONS000496
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S.N. 10/662062

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claim 3 is not made obvious by the combined relied on references.

Claim 11 depends from claims 8 and 9 and includes all the limitations of claims 8 and 9. The deficiency of the Bridge reference relative to claims 8 and 9 is explained in the traversal of the 35 USC 102 rejection of claims 8 and 9. The addition of the charge controlled delay circuit of Shibata et al does not make-up for the deficiencies of Bridge. Accordingly, it is respectfully submitted that claim 11 is not made obvious by the combined relied on references.

Claim 20 depends from claim 15 and includes all the limitations of claim 15. The deficiency of the Bridge reference relative to claim 15 is explained in the traversal of the 35 USC 102 rejection of claim 15. The addition of the charge controlled delay circuit of Shibata et al does not make-up for the deficiencies of Bridge. Accordingly, it is respectfully submitted that claim 20 is not made obvious by the combined relied on references.

The references cited but not relied upon were reviewed and are believed not to anticipate or make obvious applicant's invention.

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S.N. 10/662052

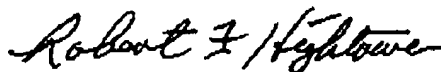
CONCLUSION

Applicant(s) made an earnest attempt to place this case in condition for allowance. In view of all of the above, it is believed that the claims are allowable, and that the case is now in condition for allowance, which action is earnestly solicited.

Although it is believed that no fees are due for this amendment, the Commissioner is hereby authorized to charge any fees may be required or credit any overpayment to Deposit Account 50-1086.

If there are matters which can be discussed by telephone to further the prosecution of this Application, the Examiner is invited to call the undersigned attorney/agent at the Examiner's convenience.

Respectfully submitted,
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